

08/805141



UNITED STATES DEPARTMENT OF COMMERCE

Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/825,141 03/28/97 BAKER J 06998/028001

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EXAMINER

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DPSASNTICE, M

ART UNIT

PAPER NUMBER

12

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 08/825,141	Applicant(s) Baker et al
	Examiner Michael N. Opsasnick	Group Art Unit 2741

Responsive to communication(s) filed on Jun 10, 1999

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

Claim(s) 1-14 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

Claim(s) 1-6 is/are allowed.

Claim(s) 7-14 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 11

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-6 are allowed over the prior art of record..

2. The following is an examiner's statement of reasons for allowance:

As per claims 1, the recited claim limitation “receiving a spelling of the word, receiving an utterance of the word”, “comparing the spelling to a files list of letter strings with associated phonemes”, “limiting the collection of possible phonetic pronunciation containing phonemes associated with the letter string of length greater than one” and “adding the word to the speech recognition vocabulary using the spelling and the best matching pronunciation” is not taught by the prior art of record. The prior art of record teaches the concept of writing subsyllable spellings to describe them (Hutchins, col. 24 line 50 - col. 27 line 16), however, Hutchins does not describe or suggest adding a word using a spelling and an utterance of the word. Brown et al (5293451) teaches the concept of using a weighted average of matching acoustic utterances and matching spellings of the word (Brown et al, 5293451, col. 2 line 10-35), however Brown et al (5293451) does not teach the use of “limiting the collection of possible phonetic pronunciations containing the phonemes associated with the letter string of length greater than one” Examiner notes that

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Brown et al performs limiting the phonetic pronunciation set, but just to a letter string of one, i.e., one letter at a time.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Brown et al (5293451).

As per claim 7,Brown et al (5293451) teaches:

"receiving a spelling of the word" as receiving spelling of the word (col. 2 lines 12-13)

"receiving an utterance of the word" receiving word utterance (col. 1 lines 45-47)

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“creating a net of possible phonetic pronunciations of the word by comparing the spelling to a files list of letter strings with associated phonemes” as using match calculator to calculate the closeness of a match between word models and the spelling of the word (col. 12, lines 56-59)

“using speech recognition to find a best matching pronunciation from the collection that best matches the utterance of the word” as calculating match between word models and the utterance (col. 12 lines 50-56)

“adding the word to the speech recognition vocabulary using the spelling and the best matching pronunciation” as updating the model of the word if there is an improvement in the match score compared to the score of the previously modeled word (col. 13 lines 42-50).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchins (5208897) in view of Brown et al (5293451).

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As per claims 8,10, Hutchins (5208897) teaches:

“matching first two letters...to classified words...matching phonemes....to phoneme of classified words...placing the word in the class list” as matching phonemes of the subsyllables (col. 10 lines 18-44), generating syllables from the spelled based subsyllables (col. 11 line 2 - col. line 13), and generating words according to the syllables (col. 11 lines 32-42);

Hutchins (5208897) does not explicitly teach the use of the recognition system as a means to add the recognized word to a speech recognition dictionary, however, Brown et al (5293451) teaches the use of a spelling technique to add recognized words to a speech recognition dictionary (col. 13, lines 42-50). Therefore, it would have been obvious to one of ordinary skill in the art of recognition technology to add the recognized word as taught by Hutchins (5208897) to a dictionary because it would advantageously allow the user to update the word models (Brown et al (5293451), col. 13, lines 42-50).

As per claim 9, Hutchins (5208897) teaches:

“matching phonemes....classified words” as syllable to word mapping (col. 11 lines 26-42);

As per claims 10,14, Hutchins (5208897) teaches:

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“performing a direct look up...matching the first phoneme...selecting the first word in the database...matching the first phoneme of the word...placing the word in the class list” as looking up spellings for converting subwords to words (col. 15 lines 6-25);

As per claim 11, Hutchins (5208897) teaches:

“matching the first phoneme of the word...same first four phonemes” as looking up spellings for converting subwords to words (col. 15 lines 6-25; Examiner notes that Hutchinson teaches the concept of matching the phonemes until a match has been made));

As per claim 12, Hutchins (5208897) teaches:

“selecting first word in the database having the same first four phonemes” as looking up spellings for converting subwords to words (col. 15 lines 6-25; Examiner notes that Hutchinson teaches the concept of matching the phonemes until a match has been made));

As per claim 13, Hutchins (5208897) teaches:

“matching the first four phoneme of the word...classified words in the sub-list” as looking up spellings for converting subwords to words (col. 15 lines 6-25; Examiner notes that Hutchinson teaches the concept of matching the phonemes until a match has been made));

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Response to Arguments

7. Applicant's arguments filed 6/10/99 have been fully considered but they are not persuasive.

On pages 3-4 of Amendment B, applicant argues (pertaining to claims 8 and 10) that Hutchins is directed toward speech recognition and not towards placing a word in a speech recognition dictionary. Examiner points to the new rejections given above, which have been necessitated by Amendment B.

On pages 5-6, applicant's arguments against the Brown reference can best be summarized on the first full paragraph on page 6. Applicant argues that Brown limits the number of possible word models by selecting the highest probability sound models. Examiner argues that Brown teaches a plurality of possibilities (e.g., col. 6 lines 7-11) and that Brown teaches the concept of a plurality of choices; i.e., Brown advances the old and well known technology from a plethora of choices to providing a limited number of choices, for the old and well known reason of reduction of a data set will reduce storage space and improve access times.

Conclusion

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8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

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Or:

(703) 305-9508 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA.,
Sixth Floor (Receptionist).

10. Any inquiry concerning this communication or earlier communications from the examiner
should be directed to Michael Opsasnick whose telephone number is (703)305-4089.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,
David R. Hudspeth, can be reached at (703)308-4825. The facsimile phone number for this group
is (703)305-9508.

Any inquiry of a general nature or relating to the status of this applications should be
directed to the Group receptionist whose telephone number is (703)305-3900.

Michael N. Opsasnick

August 21, 1999



DAVID R. HUDSPETH
SUPERVISORY PATENT EXAMINER
GROUP 2700